Available online at www.sciencedirect.com
SCIENCE DIRECT®
ELSEVIER
Pharmacology, Biochemistry and Behavior 78 (2004) 837–842
PHARMACOLOGY BIOCHEMISTRY AND BEHAVIOR
www.elsevier.com/locate/pharmbiochembeh

CONTENTS
VOLUME 78, 2004

CONTENTS VOLUME 78 NUMBER 1 2004

ARTICLES

Lobeline produces conditioned taste avoidance in rats.
HARROD, S.B., L.P. DWOSKIN and M.T. BARDO 1

Antidepressant- and anxiolytic-like activity of magnesium in mice.
POLESZAK, E., B. SZEWCZYK, E. KĘDZIERSKA, P. WLAŹ, A. PILC and G. NOWAK 7

Sex differences in voluntary oral nicotine consumption by adolescent mice: A dose-response experiment.
KLEIN, L.C., M.M. STINE, D.J. VANDENBERGH, C.A. WHETZEL and H.M. KAMENS 13

Antianxiety and antidepressant effects of riparin III from *Aniba riparia* (Nees) Mez (Lauraceae) in mice.
SOUSA, F.C.F., C.T.V. MELO, A.P. MONTEIRO, V.T.M. LIMA, S.J.C. GUTIERREZ, B.A. PEREIRA, J.M. BARBOSA-FILHO, S.M.M. VASCONCELOS, M.F. FONTELES and G.S.B. VIANA 27

Spermidine/spermine N^1-acetyltransferase overexpression in mice induces hypoactivity and spatial learning impairment.
KAASINEN, S.K., M. OKSMAN, L. ALHONEN, H. TANILA and J. JÄNNE 35

Effect of acute and chronic olanzapine treatment on phencyclidine-induced behavioral sensitization in rats with neonatal dopamine loss.
MOY, S.S., A. FERNANDES, Y. QIAN, D.J. ROTELLA, R.M. KOSTREWA and G.R. BREESE 47

Assessing subjective and psychomotor effects of the herbal medication valerian in healthy volunteers.
GUTIERREZ, S., M.K. ANG-LEE, D.J. WALKER and J.P. ZACNY 57

Sedative and motor-impairing effects of neuropeptide Y and ethanol in selectively bred P and NP rats.
GILPIN, N.W., R.B. STEWART, R.L. ELDER, Y. KHO, J.M. MURPHY, T.-K. Li and N.E. BADIA-ELDER 65

Susceptibility to audiogenic seizure and neurotransmitter amino acid levels in different brain areas of IL-6-deficient mice.
DE LUCA, G., R.M. DI GIORGIO, S. MACAIONE, P.R. CALPONA, S. COSTANTINO, E.D. DI PAOLA, A. DE SARRO, G. CILIBERTO and G. DE SARRO 75

$GABA_A$ receptors modulate cannabinoid-evoked hypothermia.
RAWLS, S.M., R.J. TALLARIDA, D.A. KON, E.B. GELLER and M.W. ADLER 83

Intranasal cocaine in humans: Acute tolerance, cardiovascular and subjective effects.
FOLTIN, R.W. and M. HANEY 93

Effect of felbamate and its combinations with conventional antiepileptics in amygdala-kindled rats.
BOROWICZ, K.K., N. RATNARAJ, P.N. PATSALOS and S.J. CZUCZWAR 103

Normal spatial and contextual learning for ketamine-treated rats in the pilocarpine epilepsy model.
McKAY, B.E. and M.A. PERSINGER 111

Chronic aspartame affects T-maze performance, brain cholinergic receptors and Na^+,K^+-ATPase in rats.
CHRISTIAN, B., K. McCONNAUGHEY, E. BETHEA, S. BRANTLEY, A. COFFEY, L. HAMMOND, S. HARRELL, K. METCALF, D. MUEHLENBEIN, W. SPRUILL, L. BRINSON and M. McCONNAUGHEY 121

0091-3057/$–see front matter © 2004 Elsevier Inc. All rights reserved.

Aphrodisiac properties of *Montanoa tomentosa* aqueous crude extract in male rats.
CARRO-JUÁREZ, M., E. CERVANTES, M. CERVANTES-MÉNDEZ and G. RODRÍGUEZ-MANZO 129

The role of alpha-adrenoceptor mechanism(s) in morphine-induced conditioned place preference in female mice.
SAHRAEI, H., H. GHAZZAGHI, M.-R. ZARRINDAST, H. GHOSHOONI, H. SEPEHRI and A. HAERI-ROHAN 135

Biochemical, behavioral and immunohistochemical alterations in MPTP-treated mouse model of Parkinson's disease.
KUROSAKI, R., Y. MURAMATSU, H. KATO and T. ARAKI 143

Delay fear conditioning modifies phospholipase C-β1a signaling in the hippocampus and frontal cortex.
WEEBER, E.J. and K.K. CALDWELL 155

Antidepressant-like effects of the acute and chronic administration of nicotine in the rat forced swimming test and its interaction with flouxetine.
VÁZQUEZ-PALACIOS, G., H. BONILLA-JAIME and J. VELÁZQUEZ-MOCTEZUMA 165

Morphine and endomorphin-1 differently influence pronociceptin/orphanin FQ system in neuropathic rats.
MIKA, J., M.K.H. SCHÄFER, I. OBARA, E. WEIHE and B. PRZEWLOCKA 171

Early administration of nicotinamide prevents learning and memory impairment in mice induced by 1-methyl-4-phenyl-1, 2, 3, 6-tetrahydropyridine.
YANG, J., L. HE, J. WANG and J.D. ADAMS JR. 179

Effects of oxazepam on methamphetamine-induced conditioned place preference.
GOEDERS, J.E. and N.E. GOEDERS 185

CONTENTS VOLUME 78 NUMBER 2 2004

EDITORIAL

Editorial
FILE, S.E. 189

ARTICLES

Protective effect of pregnanolone against lipoperoxidation and free radicals generation induced in hypothalamus of ovariectomized rats submitted to CO_2 exposure.
PREDIGER, M.E., I.R. SIQUEIRA, G.D. GAMARO, M.S. SILVA, C.A. NETTO and C. DALMAZ 191

Sex differences in the escalation of intravenous cocaine intake following long- or short-access to cocaine self-administration.
ROTH, M.E. and M.E. CARROLL 199

Differential contribution of cholecystokinin receptors to stress-induced modulation of seizure and nociception thresholds in mice.
HOMAYOUN, H. and A.R. DEHPOUR 209

Thermal analgesic effects from weak, complex magnetic fields and pharmacological interactions.
MARTIN, L.J., S.A. KOREN and M.A. PERSINGER 217

Lesions of the laterodorsal tegmental nucleus disrupt prepulse inhibition of the acoustic startle reflex.
JONES, C.K. and H.E. SHANNON 229

Naltrexone does not prevent acquisition or expression of flavor preferences conditioned by fructose in rats.
BAKER, R.W., Y. LI, M.G. LEE, A. SCLAFANI and R.J. BODNAR 239

Role of the NO-cGMP pathway in the systemic antinociceptive effect of clonidine in rats and mice.
DE MOURA, R.S., A.A.S. RIOS, E.J.A. SANTOS, A.B.A. NASCIMENTO, Â. DE CASTRO RESENDE, M.L. NETO, L.F. DE OLIVEIRA, A.C.M. RIBEIRO and T. TANO 247

Intracerebroventricular tryptophan increases heating and heat storage rate in exercising rats.
SOARES, D.D., N.R.V. LIMA, C.C. COIMBRA and U. MARUBAYASHI 255

Modulation of the stimulus effects of (+)amphetamine by the 5-HT$_6$ antagonist MS-245.
PULLAGURLA, M., T. BONDAREVA, R. YOUNG and R.A. GLENNON 263

Automated tests for measuring the effects of antidepressants in mice.
CROWLEY, J.J., M.D. JONES, O.F. O'LEARY and I. LUCKI 269

Central H3R activation by thioperamide does not affect energy balance.
SINDELAR, D.K., M.L. SHEPPERD, R.T. PICKARD, J. ALEXANDER-CHACKO, M.J. DILL, J.W. CRAMER, D.P. SMITH and R. GADSKI 275

Alterations in the distribution and orexigenic effects of dexamethasone in CAR-null mice.
QATANANI, M., P. WEI and D.D. MOORE 285

The effects of continuous cocaine dose, treatment, and withdrawal duration on the induction of behavioral tolerance and dopamine autoreceptor function.
KING, G.R., C. HILLBURN, G. PINTO and J. KONEN 293

Inhibitory effect of GABAergic drugs in cocaine-induced genital reflexes in paradoxical sleep-deprived male rats.
ANDERSEN, M.L. and S. TUFIK 301

Effect of pretraining administration of NC-1900, a vasopressin fragment analog, on memory performance in non- or CO_2-amnesic mice.
SATO, T., K.-I. TANAKA, T. TERAMOTO, Y. OHNISHI, K. HIRATE, M. IRIFUNE and T. NISHIKAWA 309

The antidepressant effect of ethanol extract of radix puerariae in mice exposed to cerebral ischemia reperfusion.
YAN, B., D.-Y. WANG, D.-M. XING, Y. DING, R.-F. WANG, F. LEI and L.-J. DU 319

Pilocarpine-induced status epilepticus in rats: Lipid peroxidation level, nitrite formation, GABAergic and glutamatergic receptor alterations in the hippocampus, striatum and frontal cortex.
FREITAS, R.M., F.C.F SOUSA, S.M.M. VASCONCELOS, G.S.B. VIANA and M.M.F. FONTELES 327

Centrally administered oxytocin elicits exaggerated grooming in oxytocin null mice.
AMICO, J.A., R.R. VOLLMER, J.R. KARAM, P.R. LEE, X. LI, J.I. KOENIG and M.M. McCARTHY 333

Acute and chronic stress alter ecto-nucleotidase activities in synaptosomes from the rat hippocampus.
FONTELLA, F.U., A.N. BRUNO, L.M. CREMA, A.M.O. BATTASTINI, J.J.F. SARKIS, C.A. NETTO and C. DALMAZ 341

Lack of effect of two oral sodium channel antagonists, lamotrigine and 4030W92, on intradermal capsaicin-induced hyperalgesia model.
WALLACE, M.S., S. QUESSY and G. SCHULTEIS 349

Multibehavioral analysis of fear and anxiety before, during, and after experimentally induced predatory stress in *Callithrix penicillata*.
BARROS, M., M.A. DE SOUZA SILVA, J.P. HUSTON and C. TOMAZ 357

Corticosterone increases spike-wave discharges in a dose- and time-dependent manner in WAG/Rij rats.
SCHRIDDE, U. and G.V. LUIJTELAAR 369

CONTENTS VOLUME 78 NUMBER 3 2004

Special Issue:
Sex and Drugs

Guest Editors:
Marlene A. Wilson
Sandra J. Kelly

EDITORIAL

Editorial
WILSON, M.A. and S.J. KELLY 377

REVIEW

Preclinical models of sexual desire: Conceptual and behavioral analyses.
ÅGMO, A., A.L. TURI, E. ELLINGSEN and H. KASPERSEN 379

ARTICLES

Progestins' actions in the VTA to facilitate lordosis involve dopamine-like type 1 and 2 receptors.
FRYE, C.A., A.A. WALF and K. SUMIDA 405

Sexual experience and conditioned place preference in male rats.
CAMACHO, F., C. SANDOVAL and R.G. PAREDES 419

Behavioral analysis of male rat sexual motivation and performance following acute ethanol treatment.
FERRARO III, F.M. and S.W. KIEFER 427

Interaction of chronic ethanol exposure and finasteride: Sex and strain differences.
FINN, D.A., S.L. LONG, M.A. TANCHUCK and J.C. CRABBE 435

Anxiolytic effects of diazepam and ethanol in two behavioral models: Comparison of males and females.
WILSON, M.A., P.R. BURGHARDT, K.A. FORD, M.B. WILKINSON and S.D. PRIMEAUX 445

Similar anxiety-like responses in male and female rats exposed to repeated withdrawals from ethanol.
OVERSTREET, D.H., D.J. KNAPP and G.R. BREESE 459

Sexually dimorphic effects of postnatal allopregnanolone on the development of anxiety behavior after early deprivation.
ZIMMERBERG, B. and E.W. KAJUNSKI 465

Testosterone's metabolism in the hippocampus may mediate its anti-anxiety effects in male rats.
FRYE, C.A. and K.L. EDINGER 473

Androgens in the hippocampus can alter, and be altered by, ictal activity.
RHODES, M.E. and C.A. FRYE 483

Sex differences in effects of mild chronic stress on seizure risk and $GABA_A$ receptors in rats.
CHADDA, R. and L.L. DEVAUD 495

3α,5α-THP mediates progestins' effects to protect against adrenalectomy-induced cell death in the dentate gyrus of female and male rats.
RHODES, M.E., C.M. McCORMICK and C.A. FRYE 505

Sex dimorphisms in the neuroprotective effects of estrogen in an animal model of Parkinson's disease.
GILLIES, G.E., H.E. MURRAY, D. DEXTER and S. McARTHUR 513

Antidepressant effects of ERβ-selective estrogen receptor modulators in the forced swim test.
WALF, A.A., M.E. RHODES and C.A. FRYE 523

Hippocampal 3α,5α-THP may alter depressive behavior of pregnant and lactating rats.
FRYE, C.A. and A.A. WALF 531

Chronic stress alters amphetamine effects on behavior and synaptophysin levels in female rats.
BISAGNO, V., C.A. GRILLO, G.G. PIROLI, P. GIRALDO, B. McEWEN and V.N. LUINE 541

Estrogen has mnemonic-enhancing effects in the inhibitory avoidance task.
RHODES, M.E. and C.A. FRYE 551

Mnemonic effects of testosterone and its 5α-reduced metabolites in the conditioned fear and inhibitory avoidance tasks.
EDINGER, K.L., B. LEE and C.A. FRYE 559

Acute stress impairs spatial memory in male but not female rats: Influence of estrous cycle.
CONRAD, C.D., J.L. JACKSON, L. WIECZOREK, S.E. BARAN, J.S. HARMAN, R.L. WRIGHT and D.L. KOROL 569

Sex differences and repeated intravenous nicotine: Behavioral sensitization and dopamine receptors.
HARROD, S.B., C.F. MACTUTUS, K. BENNETT, U. HASSELROT, G. WU, M. WELCH and R.M. BOOZE 581

Functional responses to the cannabinoid agonist WIN 55,212-2 in neonatal rats of both genders: Influence of weaning.
BORCEL, E., L. PÉREZ-ALVAREZ, M.L. DE CEBALLOS, B.G. RAMIREZ, E.M. MARCO, B. FERNÁNDEZ, M. RUBIO, C. GUAZA and M.-P. VIVEROS 593

No difference in responsiveness to a low dose of alcohol between healthy women and men.
NYBERG, S., G. WAHLSTRÖM, T. BÄCKSTRÖM and I.S. POROMAA 603

Binge drinking and sex: Effects on mood and cognitive function in healthy young volunteers.
HARTLEY, D.E., S. ELSABAGH and S.E. FILE 611

Mood changes after cognitive testing in late middle-age: Impacts of sex and habitual alcohol consumption.
ELSABAGH, S., D. HARTLEY, D. RANDALL, P. SETH and S.E. FILE 621

Does drinking have effects on mood and cognition in male and female students?
RANDALL, D.C., S.M. ELSABAGH, D.E. HARTLEY and S.E. FILE 629

Effects of transdermally administered nicotine on aspects of attention, task load, and mood in women and men.
TRIMMEL, M. and S. WITTBERGER 639

Cue reactivity in smokers: The effects of perceived cigarette availability and gender.
FIELD, M. and T. DUKA 647

CONTENTS VOLUME 78 NUMBER 4 2004

ARTICLES

The effects of a cold-water stimulus on butorphanol effects in males and females.
ZACNY, J.P. and N.J. BECKMAN 653

Age differences in an animal model of obsessive–compulsive disorder: Participation of dopamine: Dopamine in an animal model of OCD.
ULLOA, R.-E., H. NICOLINI and A. FERNÁNDEZ-GUASTI 661

Electroencephalographic effects induced by choline pivaloyl esters in scopolamine-treated or nucleus basalis magnocellularis lesioned rats.
RISPOLI, V., D. ROTIROTI, V. CARELLI, F. LIBERATORE, L. SCIPIONE, R. MARRA, S. TORTORELLA and B. DI RIENZO 667

Gender-related response in open-field activity following developmental nicotine exposure in rats.
ROMERO, R.D. and W-.J.A. CHEN 675

Chronic treatment with fluvoxamine desensitizes 5-HT_{2C} receptor-mediated hypolocomotion in rats.
YAMAUCHI, M., T. TATEBAYASHI, K. NAGASE, M. KOJIMA and T. IMANISHI 683

Reciprocal cross-sensitization between amphetamine and salt appetite.
CLARK, J.J., and I.L. BERNSTEIN 691

Effects of progesterone treatment on cocaine responses in male and female cocaine users.
SOFUOGLU, M., E. MITCHELL and T.R. KOSTEN 699

Feeding responses to μ-, δ- and κ-opioid receptor agonists in the meat-type chick.
BUNGO, T., K. KAWAMURA, T. IZUMI, K.-I. DODO and H. UEDA 707

Testosterone-dependent antidepressant-like effect of noradrenergic but not of serotonergic drugs.
MARTÍNEZ-MOTA, L. and A. FERNÁNDEZ-GUASTI 711

Pentacyclic triterpenoids, α,β-amyrins, suppress the scratching behavior in a mouse model of pruritus.
OLIVEIRA, F.A., R.C.P. LIMA-JUNIOR, W.M. CORDEIRO, G.M. VIEIRA-JÚNIOR, M.H. CHAVES, F.R.C. ALMEIDA, R.M. SILVA, F.A. SANTOS and V.S.N. RAO 719

Circadian-dependent effect of melatonin on dopaminergic D_2 antagonist-induced hypokinesia and agonist-induced stereotypies in rats.
SUMAYA, I.C., D.M. BYERS, L.N. IRWIN, S. DEL VAL and D.E. MOSS 727

Modafinil facilitates performance on a delayed nonmatching to position swim task in rats.
WARD, C.P., J.R. HARSH, K.M. YORK, K.L. STEWART and J.G. McCOY 735

The effect of baclofen alone and in combination with naltrexone on ethanol consumption in the rat.
STROMBERG, M.F. 743

Haloperidol- and clozapine-induced oxidative stress in the rat brain.
POLYDORO, M., N. SCHRÖDER, M.N.M. LIMA, F. CALDANA, D.C. LARANJA, E. BROMBERG, R. ROESLER, J. QUEVEDO, J.C.F. MOREIRA and F. DAL-PIZZOL 751

Pharmacological and neurochemical evidence for antidepressant-like effects of the herbal product Catuama.
CAMPOS, M.M., E.S. FERNANDES, J. FERREIRA, L.B. BORTOLANZA, A.R.S. SANTOS and J.B. CALIXTO 757

Altered sleep latency and arousal regulation in mice lacking norepinephrine.
HUNSLEY, M.S. and R.D. PALMITER 765

Evidence that muscarinic receptors are involved in nicotine-facilitated spatial memory.
LIU, Y., Y. WANG, X. SUN and H. WANG 775

Pregnenolone sulfate potentiates the effects of NMDA on hippocampal alanine and dopamine.
MACIEJAK, P., A.I. CZŁONKOWSKA, A. BIDZIŃSKI, J. WALKOWIAK, J. SZYNDLER, M. LEHNER, A. SKÓRZEWSKA, D. TURZYŃSKA, M. ZIENOWICZ, A. WISŁOWSKA, E. TARACHA, P. KRZĄŚCIK and A. PŁAŹNIK 781

Improvement of scopolamine-induced memory impairment by Z-ajoene in the water maze in mice.
YAMADA, N., A. HATTORI, T. HAYASHI, T. NISHIKAWA, H. FUKUDA and T. FUJINO 787

Electroacupuncture combined with indomethacin enhances antihyperalgesia in inflammatory rats.
ZHANG, R.-X., L. LAO, X. WANG, K. REN and B.B. BERMAN 793

Effects of the traditional Japanese medicine Unkei-to on the corticotropin-releasing factor–induced increase in locomotor activity.
TERAWAKI, K., K. KOIKE, M. YUZURIHARA, Y. KASE, S. TAKEDA, M. ABURADA, K. MURAKAMI, S. OHNO, N. SUZUKI and M. INOUE 799

The effects of dopamine D3 agonists and antagonists in a nonhuman primate model of tardive dyskinesia.
MALIK, P., M.B. ANDERSEN and L. PEACOCK 805

Evaluation of the motor initiation hypothesis of APD-induced conditioned avoidance decreases.
LI, M., J. PARKES, P.J. FLETCHER and S. KAPUR 811

Stimulus effects of three sulfur-containing psychoactive agents.
KHORANA, N., M.R. PULLAGURLA, M. DUKAT, R. YOUNG and R.A. GLENNON 821

Cocaine, but not alcohol, reinstates cocaine-induced place preferences.
BUSSE, G.D. and A.L. RILEY 827

Contents of Volume 78 837

Author Index 843

Keyword Index 847